



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/618,558

07/11/2003

Peter Gansen

64215-028 CIP

5170

30743

7590

12/14/2007

WHITHAM, CURTIS & CHRISTOFFERSON & COOK, P.C.

11491 SUNSET HILLS ROAD

SUITE 340

RESTON, VA 20190

EXAMINER

SERGEANT, RABON A

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

12/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/618,558	Applicant(s) GANSEN ET AL.	
	Examiner Rabon Sergeant	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4-21,25-28 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4-21 and 24-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/861,330.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Claims 2, 4-16, 18-21, 25-28, and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language, “generally irregular”, renders the claims indefinite, because it is unclear to what extent “irregular” is modified by “generally”. In view of the use of “generally”, it cannot be determined exactly what types of shapes are encompassed or excluded by the language.

2. Claims 26-28 and 30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants have failed to provide adequate support for the claimed values of the properties within claims 26-28 and 30 for the full scope of the claims. Examples can only provide support for the exact value, as it pertains to the exemplified composition. Accordingly, adequate support has not been provided for the claimed specific values for all compositions that are encompassed by the claims. For example, only the composition of Example 2 provides support for the claimed tensile strength of 280 kPa. Applicants have not addressed this previously set forth issue by the examiner. The position is maintained that the exemplified compositions are not adequate to provide support for the full scope of the claims, in other words, all compositions encompassed by the claims. Contrary to applicants' assertions, the rejection of claims 27 and 30 was not an oversight by the examiner.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 2, 4-21, 25-28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schapel et al. ('834) in view of King ('135) and further in view of Ehrlich, Jr. ('702) and Fracalossi et al. ('221) and DE 3841043.

Schapel et al. disclose polyurethane gel compositions, suitable for use as pressure distributing elements, such as seat cushions, mattresses, and shoe components, wherein the gel composition corresponds to applicants' claimed gel matrix component. See abstract and columns 1-11. Patentees further disclose that the polymer may contain fillers. See column 7, lines 3+. Furthermore, given that the gels of the reference and gels of applicants are produced from the same reactants in the same ratios and given applicants' statement within line 11 of page 1 of the specification, the position is taken that compositions of Schapel et al. are clear.

5. Though the primary reference discloses the use of fillers, Schapel et al. fail to specifically recite the use of coarse materials to form a composite. However, the use of materials considered to correspond to applicants' claimed coarse particles within a polyurethane matrix, to be used as shoe soles, cushions, and mattresses, was known at the time of invention. King discloses polyurethane/cork composites useful for such applications as the production of shoe inner and outer soles, wherein the particle size of the cork meets that claimed. Furthermore, King discloses embodiments wherein a non-foamed polyurethane composite is produced. See abstract; column 2; column 6, lines 4+; and Example III. Ehrlich, Jr. discloses the attendant advantages of incorporating wood or cork particles within a polyurethane matrix, to be used as a shoe sole. See column 2, lines 37+. Fracalossi et al. disclose that such materials as particulate foam, cork, and sawdust are added to a polyurethane to improve its physical properties. See column 3. Fracalossi et al. further disclose that the materials may be used as cushions and mattresses. See abstract. DE 3841043 discloses the production of polyurethane/cork composites, wherein the cork particles sizes meet those claimed.

6. Therefore, the position is taken in view of the aforementioned teachings within the secondary references, especially those in view of King, that it would have been obvious to incorporate "coarse" particulate materials into the composition of Schapel et al., so as to obtain materials having improved properties as compared to the properties of the non-particulate containing compositions.

7. Applicants' arguments have been considered; however, the prior art rejection has been maintained. Applicants' arguments are deficient for the following reasons. Firstly, the remarks fail to appreciate the combined teachings of the references. The position is maintained that the

skilled artisan in possession of the relied upon teachings would have found it obvious to utilize conventional coarse materials within virtually any polyurethane system that may employ fillers, and as aforementioned, Schapel et al. clearly provide for the use of fillers. Secondly, applicants' remarks concerning their use of a "gel" as compared to the polyurethanes disclosed by the secondary references are not seen to distinguish the claims from the relied upon art. Since a polyurethane gel is simply considered to be a polyurethane that possesses a degree of crosslinking, it is not seen that the gel aspect of the claims conveys any patentable distinction, relative to the prior art polyurethane systems. To suggest otherwise conveys more definition and structure to "gel" than is supported by the state of the art. Thirdly, applicants' remarks concerning "viscoelastic" are not commensurate in scope with the claims, because the polyurethanes have not been claimed as being viscoelastic. Additionally, it has not been established that the polyurethane systems of the prior art are not viscoelastic. Lastly, given that the examples are not commensurate in scope with the claims and the comparative examples fail to set forth prior art polyurethane/coarse particle composites, applicants have failed to demonstrate that their claimed properties are unexpected.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period


Application/Control Number:
10/618,558
Art Unit: 1796

Page 6

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

R. Sergent
December 11, 2007


RABON SERGENT
PRIMARY EXAMINER